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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/484,928	06/07/95	MICHELSON G	P-12509

EXAMINER
BROWN, T

F3M1/0927

ART UNIT	PAPER NUMBER
3301	

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DATE MAILED: 09/27/96

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☑ Claim(s) 1-136 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☑ Claim(s) 1-135 is/are rejected.

☑ Claim(s) 136 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☑ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☑ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 22, 26-29, 48, 53-54, 72, 77, 94, 98-103, 120, 124-126 and 131 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Kuntz.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 5-7, 9-10, 17-20, 30-32, 34-35, 42-45, 55-57, 59-60, 67-70, 78-82, 89-92, 104-105, 107-108, 115-118, and 132 are rejected under 35 U.S.C. § 103 as being unpatentable over Kuntz in view of Bagby.

Kuntz discloses in figure 15 a frusto-conical interbody spinal fusion implant, substantially as claimed. However, Kuntz does not

disclose a bone growth material, a fusion promotion material, a plurality of openings, an outer surface that is porous, a larger insertion end than trailing end and an internal chamber. Bagby teaches in figures an interbody spinal fusion implant comprising a bone growth material (col. 6, lines 1-5), a fusion promotion material (bone chips), an outer surface that is porous (the openings make the implant porous), a plurality of openings 11 and an internal chamber. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the spinal implant as disclosed by Kuntz could be constructed with a bone growth material, a fusion promotion material, a plurality of openings, an outer surface that is porous and an internal chamber as taught by Bagby. The bone growth material and the fusion promotion material would cause the bone to adhere and grow around the implant. The openings would allow the bone growth material to grow through the openings and adhere to the vertebrae. The internal chamber could be used to hold the bone growth material to allow it to grow ~~outer~~ outward through the openings. It is inherent that the insertion end could be larger than the trailing end of the implant.

Claims 8, 13, 33, 38, 58, 63, 80, 85, 106, 111, 128 and 134 are rejected under 35 U.S.C. § 103 as being unpatentable over Kuntz in view of Ray '260.

Kuntz discloses in figure 15 a spinal implant, substantially as claimed. However, Kuntz does not disclose an implant that is

bioabsorbable and a bone engaging means that is a mesh-like material. Ray '260 teaches in figure 1 a spinal implant comprising a bioabsorbable material and a bone engaging means that is a mesh-like material 12. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the bone engaging means as taught by Ray could be incorporated into the implant as disclosed by Kuntz in order to use the mesh-like material to attract tissue growth.

Claims 11, 14-16, 23-24, 36, 39-41, 49-50, 61, 64-66, 73-74, 83-84, 86-88, 95-96, 109, 112-114, 121-122, 127, 129, 133 and 135 are rejected under 35 U.S.C. § 103 as being unpatentable over Kuntz in view of Brantigan '915.

Kuntz discloses in figure 15 a spinal implant, substantially as claimed. However, Kuntz does not disclose a bone engaging means that includes posts, surface roughenings and wells. Brantigan teaches in figures 6 and 8 a spinal implant comprising a bone engaging means that includes post (32c,32d), surface roughenings that includes knurling (fig. 6), and wells (the spaces between the post). It would have been obvious to one of ordinary skill in the art at the time the invention was made that the spinal implant as disclosed by Kuntz could be constructed with bone engaging means that includes posts, surface roughenings and wells as taught by Brantigan. The posts could be used to fasten the implant into the body, the surface roughenings could be used to attach tissue and the wells could be used to attach tissue to the implant.

Claims 21, 47, 71, 93 and 119 are rejected under 35 U.S.C. § 103 as being unpatentable over Kuntz in view of Ray '740.

Kuntz discloses in figure 15 a spinal implant, substantially as claimed. However, Kuntz does not disclose a means for closing the access opening. Ray teaches in figure 1 a spinal implant comprising a means 16 for closing an access opening (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made that the spinal implant as disclosed by Kuntz could be constructed with a means to close the access opening as taught by Ray. The means for closing the opening could be used to open the implant to place bone growth material therein.

Claim 136 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Michael Brown at telephone number (703) 308-2682.

M. Brown
17 September 1996

MICHAEL A. BROWN
PRIMARY EXAMINER
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